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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,678	12/03/2004	Mitsutoshi Shinkai	450100-05033	6633

7590 04/13/2010

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ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
04/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,678	SHINKAI ET AL.	
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 02/03/2010 have been considered but are not persuasive.

On page 9, Applicant argues that, "Brook, et al. only discloses a directory 2410 storing metadata. Nothing in Brook, et al. shows, teaches or suggests how the directory is physically stored on a disk. In other words, nothing in Brook, et al. shows, teaches or suggests physically arranging a third data series on an optical disk independently of the periodically arranged first and second data series on the optical disk in the form of annular rings as claimed in claims 1 and 8-10. Rather, Brook, et al. only discloses storing meta-data into a directory, but does not show, teach or suggest specifically the physical layout of the directory on the disk."

In response, Examiner respectfully disagrees. First of all, as described in the Office Action, Brook discloses the first, second, and third data series to be the media data, the frame metadata, and other metadata different from frame metadata, e.g. clip metadata etc, respectively. As such, at least in [0290], Brook discloses the third data series is clip metadata recorded for each clip and is recorded and arranged independently of the first data series and the second data series as independent files. It is clear that as such, the third data series must be recorded physically separated from the other data series. They cannot be physically recorded onto the same areas that are used to record the first and second data series. In other words, at least the areas used to record the third data series must be physically separate and distinct from those used

to record the first and second data series. Further, the third data series is arranged by the arrangement of disc's areas used to record the data series. As described above, such an arrangement is physically separate or independent with the arrangement of disc's areas used to record the other two data series.

In addition, at least in [0277] and Fig. 21, Brook clearly discloses the recording of the third data series is performed onto the disk only after all first and second data series are finished being recorded. Specifically, the first data series is recorded and finished being recorded at step 2104 and the second data series is recorded and being finished recorded at step 2112 while the third data series is recorded at step 2120.

Tezuka teaches data being recorded onto an optical disk in a form of annular rings at an inner circumference side of the optical disk *(see at least Fig. 1 and further in column 1, lines 15-42, column 3, lines 29-33, and column 6, lines 30-37)*. This is a conventional way of recording data into an optical disk. It would have been obvious to one skilled in the art that the data series in Brook would have been recorded in the same manner.

Applicant's arguments on pages 10-11 are not persuasive for the reasons set forth above.

Therefore, the combination of Brook, Tezuka, and David obviously discloses all and every features of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Brook et al. (US 2003/0146915 – hereinafter Brook), Tezuka et al. (US Patent 5,206,850 – hereinafter Tezuka), and David (US 2002/0131763 – hereinafter David).

Regarding claim 1, Brook discloses a recording control apparatus for controlling recording of first, second, and third data series onto a storage medium (*[0277], [0280], [0282], [0151], and [0290]*), the apparatus is characterized by comprising: first data extracting means for extracting video and audio data having a first data amount for each frame from the first data series (*[0277]; [0280]; [0282] – first data amount being the data of one frame*), the first data amount being a data amount in accordance with a data amount required for reproduction of one frame of an image for first reproduction time (*[0277]; [0280]; [0282] - first reproduction time being the reproduction time of the one data frame*); second data extracting means for extracting frame metadata having a second data amount from the second data series, the second data amount being a data amount in accordance with a data amount required for reproduction of the frame metadata for second reproduction time that is different from the first reproduction time (*[0280], [0282] – second reproduction time being the reproduction time of the frame metadata*); first recording-control means for performing recording-control to record data having the first data amount for the first data series and data having the second data amount for the second data series onto the storage medium so that frame meta data for each frame is recorded adjacent the video and audio data recorded for each frame and

the respective data are periodically arranged (*[0277], [0280], [0282]; [0135]; [0288]; Fig. 22; Fig. 28 – Examiner interprets the frame metadata is recorded adjacent the corresponding frame data because they are stored in the same storage medium MOD 512 – in Fig. 22, the data are periodically arranged, i.e. frame metadata is recorded for one frame after another – in Fig. 28, the video and audio data are also periodically arranged*); and second recording-control means for performing recording-control to record the third data series onto the storage medium only after all first and second data series are finished being recorded by the first recording control means *([0277]; [0290] Fig. 21 – also see "Response to Arguments" above)* so that the third data series is physically arranged on the disk independently of the first data series and the second data series (*[0290]; also see "Response to Arguments" above*), wherein the third data series is separately recorded and wherein the third data series is clip metadata recorded for each clip (*[0290]*).

However, Brook does not disclose the storage medium to be an optical disk and the data are arranged in a circumferential direction of the optical disk in a form of annular rings, wherein the third data series is recorded at an inner circumference side in a continuous manner.

Tezuka discloses a storage medium to be an optical disk and the data are arranged in a circumferential direction of the optical disk in a form of annular rings and data series is recorded at an inner circumference side of the optical disk (*Fig. 1; column 1, lines 15-42; column 3, lines 29-33; column 6, lines 30-37*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the optical disk disclosed by Tezuka into the recording control apparatus disclosed by Brook because optical disks such as CD and DVD are very popular recording medium that conveniently provides portability and large capacity for storage.

However, the proposed combination of Brook and Tezuka does not disclose the third data series is recorded in a contiguous manner.

David discloses data series are recorded in a contiguous manner (*[0010]*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of David into the recording control apparatus disclosed by Brook and Tezuka because, according to David, the taught feature can facilitate the reading, writing, and modifying of the data (*David: [0012]*).

Regarding claim 2, David also discloses the first data amount is a data amount that is an integral multiple of a data amount in a physical unit area of the storage medium and that is close to a data amount required for reproduction for the first reproduction time (*[0040]; [0008], [0009], [0046], [0047]*); and the second data amount is a data amount that is an integral multiple of a data amount in the physical unit area of the storage medium and that is close to a data amount required for reproduction for the second reproduction time (*[0010], [0040]; [0046], [0047]*).

Regarding claim 3, David also discloses the physical unit area is a minimum area to/from which data writing/reading is performed or an area in which an ECC block on which ECC processing is performed is recorded (*[0008], [0009], [0010]*).

Regarding claim 4, David also discloses the first recording-control means causes the data having the first data amount for the first data series and the data having the second data amount for the second data series to be recorded onto the storage medium so that boundaries of the respective data match boundaries of physical unit areas of the storage medium (*[0008], [0009], [0010], [0041], [0042]*).

Claim 5 is rejected for the same reason as discussed in claim 3 above.

Regarding claim 6, Brook also discloses the first data series is a data series of video or a data series of audio associated with the video (*[0277], [0280]*); the second data series is a data series of metadata that requires a real-time characteristic for the data series of video or the data series of audio associated with the video (*[0280], [0282]*); and the third data series is a data series of metadata that does not require a real-time characteristic for the data series of video or the data series of audio associated with the video (*[0151], [0290]*).

Regarding claim 7, Brook also discloses for each clip that constitutes the material data in a predetermined area in the first data series, the third data series uses one file containing one of at least an LTC/UMID, GPS data, front-end time code, discontinuous-point time code information, a front-end extended UMID source pack, and a discontinuous-point extended UMID source pack (*[0151]*).

Claim 8 is rejected for the same reason as discussed in claim 1 above.

Claim 9 is rejected for the same reason as discussed in claim 1 above.

Claim 10 is rejected for the same reason as discussed in claim 1 above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG Q DANG/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621